

CLAIMS

What is claimed is:

1 1. A spring tensioning mechanism comprising:
2 a support bracket;
3 an axle, supported by the support bracket;
4 an outboard plate, disposed adjacent to, and secured
5 to, the support bracket;
6 an inboard plate, disposed adjacent to the outboard
7 plate;
8 a spring, disposed around the axle, having a first
9 end secured to the inboard plate and a second end
10 operably connected to the axle.

1 2. The spring tensioning mechanism of claim 1 further
2 comprising a clocking feature on the outboard plate.

1 3. The spring tensioning mechanism of claim 2 wherein
2 the clocking feature on the outboard plate comprises a pin
3 bore.

1 4. The spring tensioning mechanism of claim 1 further
2 comprising a clocking feature on the inboard plate.

1 5. The spring tensioning mechanism of claim 4 wherein
2 the clocking feature on the inboard plate comprises a pin
3 bore.

1 6. The spring tensioning mechanism of claim 1 further
2 comprising a pin bore in the outboard plate and a
3 corresponding pin bore in the inboard plate.

1 7. The spring tensioning mechanism of claim 1 wherein
2 the inboard plate comprises at least one receiver.

1 8. The spring tensioning mechanism of claim 7 wherein
2 the receiver has the shape of a hollow square tube.

1 9. A spring tensioning mechanism comprising:
2 a support bracket having a substantially-planar main
3 panel having an axle bore disposed therein;
4 an axle, disposed orthogonally to the substantially-
5 planar main panel and passing through the axle bore and having
6 a drum secured thereto;
7 an outboard plate disposed inboard of the support
8 bracket and secured to the support bracket;
9 an inboard plate disposed inboard of the outboard
10 plate;
11 a spring, disposed around the shaft, having a first
12 end secured to the inboard plate and a second end secured to
13 the drum.

1 10. The spring tensioning mechanism of claim 9 further
2 comprising a clocking feature on the outboard plate.

1 11. The spring tensioning mechanism of claim 10 wherein
2 the clocking feature on the outboard plate comprises a pin
3 bore.

1 12. The spring tensioning mechanism of claim 9 further
2 comprising a clocking feature on the inboard plate.

1 13. The spring tensioning mechanism of claim 12 wherein
2 the clocking feature on the inboard plate comprises a pin
3 bore.

1 14. The spring tensioning mechanism of claim 9 further
2 comprising a pin bore in the outboard plate and a
3 corresponding pin bore in the inboard plate.

1 15. The spring tensioning mechanism of claim 9 wherein
2 the inboard plate comprises at least one receiver.

1 16. The spring tensioning mechanism of claim 15 wherein
2 the receiver has the shape of a hollow square tube.

1 17. A spring tensioning mechanism comprising:
2 a support bracket having a substantially-planar main
3 panel having an axle bore therein, and a mounting panel
4 disposed orthogonally to the main panel;
5 an outboard plate having a bearing therein disposed
6 inboard of the support bracket and secured thereto by at least
7 one fastener;
8 an axle, supported by the bearing and having a drum
9 disposed thereon, disposed orthogonally to the substantially-
10 planar main panel and passing through the axle bore;
11 an inboard plate disposed inboard of the outboard
12 plate having a set of receivers disposed adjacent to the
13 perimeter thereof; and
14 a coil spring, disposed around the shaft, having a
15 first end secured to the inboard plate and a second end
16 secured to the drum.

1 18. The spring tensioning mechanism of claim 17 further
2 comprising a clocking feature on the outboard plate.

1 19. The spring tensioning mechanism of claim 17 further
2 comprising a clocking feature on the inboard plate.

- 1 20. The spring tensioning mechanism of claim 17 further
2 comprising a retaining pin shaped and sized to lock the radial
3 orientation of the inboard plate with respect to the outboard
4 plate.